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1911

Asteroid, 1909, JA

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ASTEROID, 1909, JA.

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(Abstract.)

The discovery of the minor planets or asteroids has become so general in recent years, that the work of following them after their discovery is of great importance. After an orbit has been calculated the asteroid can be identified and a permanent number and name given to it; then it is a known member of our Solar System. The asteroid whose orbit and ephemeris have been computed and are given in this abstract, was discovered by Joel H. Metcalf at Taunton, Mass.

ELEMENTS AND EPHEMERIS OF PLANET 1909 JA.

Epoch 1909, Dec. 31.5, G. M. T.

M= 52° 40′ 56″.1

π=339° 10′ 45″.1		π=339° 12′ 25″.5
Ω=231° 25′ 31″.1	1909.0	Ω=231° 27′ 14″.6
i= 15° 47′ 07″.6		i= 15° 47′ 07″.1

Φ= 19° 08′ 48″.7

log μ=2.909696

log a=0.426874

RESIDUALS (O—C)

			Δα	Δδ
1909.	Dec. 3	I	+0ˢ.05	—0″.1
	Dec. 31	II	+0.05	0.0
1910.	Jan. 28	III	+0.03	—0.1

HELIOCENTRIC CO-ORDINATES 1909.0

x=(9.989949)r sin (320° 20′ 50″.2+u)

y=(9.988475)r sin (227° 26′ 05″.2+u)

z=(9.493198)r sin (271° 59′ 03″.2+u)

HELIOCENTRIC CO-ORDINATES 1911.0

x=(9.989941)r sin (320° 22′ 34″.5+u)

y=(9.988466)r sin (227° 27′ 39″.8+u)

z=(9.493376)r sin (272° 00′ 40″.2+u)

EPHEMERIS.

1911	G. M. T.	α*(1911.0)			δ*(1911.0)			log r	log Δ
Apr.	2.5	8	35	09.62	—0	53	52.5	0.544710	0.466544
	6.5	8	35	20.22	0	33	06.8	0.545108	0.474323
	10.5	8	35	49.47	—0	13	40.5	0.545488	0.482188
	14.5	8	36	36.62	+0	04	23.1	0.545856	0.490107
	18.5	8	37	40.90	0	20	59.8	0.546208	0.498040
	22.5	8	39	01.60	0	36	06.1	0.546544	0.505948
	26.5	8	40	38.00	0	49	39.4	0.546866	0.513802
	30.5	8	42	29.28	1	01	38.2	0.547168	0.521605
May	4.5	8	44	34.68	1	11	59.8	0.547458	0.529218
	8.5	8	46	53.32	1	20	44.8	0.547734	0.536729
	12.5	8	49	24.19	1	27	54.0	0.547992	0.544083
	16.5	8	52	06.61	1	33	28.0	0.548236	0.551260
	20.5	8	54	59.79	1	37	28.2	0.548464	0.558252
	24.5	8	58	03.03	1	39	55.7	0.548678	0.565047
	28.5	9	01	15.79	1	40	51.2	0.548874	0.571630
June	1.5	9	04	37.31	+1	40	16.1	0.549058	0.577989

The above elements were computed from observations made by Dr. Palisa at Vienna, on Dec. 3, Dec. 31, 1909, and Jan. 28, 1910.

*Corrected for aberration.